



6AW8

6AW8

HIGH-MU TRIODE— SHARP-CUTOFF PENTODE

9-PIN MINIATURE TYPE

Intended for use in equipment having
series heater-string arrangement

GENERAL DATA

Electrical:

Heater, for Unipotential Cathodes:

Voltage. 6.3 ac or dc volts
Current. 0.6 amp
Warm-up time (Average) 11 sec

For definition of heater warm-up time and method of determining
it, see sheet HEATER WARM-UP TIME MEASUREMENT at front of
this Section.

Direct Interelectrode Capacitances:

	Without External Shield	With External Shield ^o	
Triode Unit:			
Grid to plate.	2.2	2.2	μf
Grid to cathode and heater	3.2	3.4	μf
Plate to cathode and heater	0.32	1.7	μf
Pentode Unit:			
Grid No.1 to plate	0.036 max.	0.03 max.	μf
Grid No.1 to cathode & grid No.3 & internal shield, grid No.2, and heater	11	11	μf
Plate to cathode & grid No.3 & internal shield, grid No.2, and heater	2.8	3.6	μf
Triode grid to pentode plate.	0.03 max.	0.008 max.	μf
Pentode grid No.1 to triode plate	0.008 max.	0.005 max.	μf
Pentode plate to triode plate	0.2 max.	0.05 max.	μf

Mechanical:

Mounting Position. Any
Maximum Overall Length 2-5/8"
Maximum Seated Length. 2-3/8"
Length, Base Seat to Bulb Top (Excluding tip) . . . 2" ± 3/32"
Maximum Diameter 7/8"
Bulb T-6-1/2

^o With external shield JETEC No.315 connected to cathode of unit under
test.

MAR. 1, 1955

TUBE DIVISION
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

TENTATIVE DATA 1

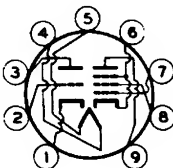
6AW8



6AW8

HIGH-MU TRIODE— SHARP-CUTOFF PENTODE

Base	Small-Button Noval 9-Pin (JETEC No.E9-1)
Basing Designation for BOTTOM VIEW	9DX
Pin 1 - Triode Cathode	Pin 6 - Pent. Cath., Grid No.3, Internal Shield
Pin 2 - Triode Grid	Pin 7 - Pentode Grid No.1
Pin 3 - Triode Plate	Pin 8 - Pentode Grid No.2
Pin 4 - Heater	Pin 9 - Pent. Plate
Pin 5 - Heater	



TRIODE UNIT - Class A₁ Amplifier

Maximum Ratings, Design-Center Values:

PLATE VOLTAGE.	300	max.	volts
PLATE DISSIPATION.	1	max.	watt
PEAK HEATER-CATHODE VOLTAGE:			
Heater negative with respect to cathode	200	max.	volts
Heater positive with respect to cathode	200 [▲]	max.	volts

Typical Operation and Characteristics:

Plate Voltage.	200	volts
Grid Voltage	-2	volts
Amplification Factor	70	
Plate Resistance (Approx.)	17500	ohms
Transconductance	4000	μmhos
Grid Voltage (Approx.) for plate current of 10 μamp	-5	volts
Plate Current.	4	ma

Maximum Circuit Values:

Grid-Circuit Resistance:			
For fixed-bias operation	0.5	max.	megohm
For cathode-bias operation	1.0	max.	megohm

PENTODE UNIT - Class A₁ Amplifier

Maximum Ratings, Design-Center Values:

PLATE VOLTAGE.	300	max.	volts
GRID-No.2 (SCREEN) SUPPLY VOLTAGE.	300	max.	volts
GRID-No.2 VOLTAGE.	<i>See Grid-No.2 Input Rating Chart at front of Receiving Tube Section</i>		
GRID-No.1 (CONTROL-GRID) VOLTAGE:			
Negative bias value.	50	max.	volts
Positive bias value.	0	max.	volts
PLATE DISSIPATION.	3	max.	watts

[▲]: See next page.

MAR. 1, 1955

TUBE DIVISION

TENTATIVE DATA 1

RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY



6AW8

6AW8

HIGH-MU TRIODE— SHARP-CUTOFF PENTODE

GRID-No.2 INPUT:

For grid-No.2 voltages up to 150 volts 1 max. watt
For grid-No.2 voltages between 150
and 300 volts. See Grid-No.2 Input Rating Chart
at front of Receiving Tube Section

PEAK HEATER-CATHODE VOLTAGE:

Heater negative with respect to cathode 200 max. volts
Heater positive with respect to cathode 200[▲] max. volts

Typical Operation and Characteristics:

Plate Voltage.	200	volts
Grid-No.2 Voltage.	150	volts
Grid-No.1 Voltage.	0	volts
Cathode-Bias Resistor.	180	ohms
Plate Resistance (Approx.)	0.4	megohm
Transconductance	9000	μmhos
Grid-No.1 Voltage (Approx.) for plate current of 10 μamp	-10	volts
Plate Current.	13	ma
Grid-No.2 Current.	3.5	ma

Maximum Circuit Values:

Grid-No.1-Circuit Resistance:

For fixed-bias operation 0.25 max. megohm
For cathode-bias operation 1.0 max. megohm

[▲] The dc component must not exceed 100 volts.

JULY 1, 1955

TUBE DIVISION
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

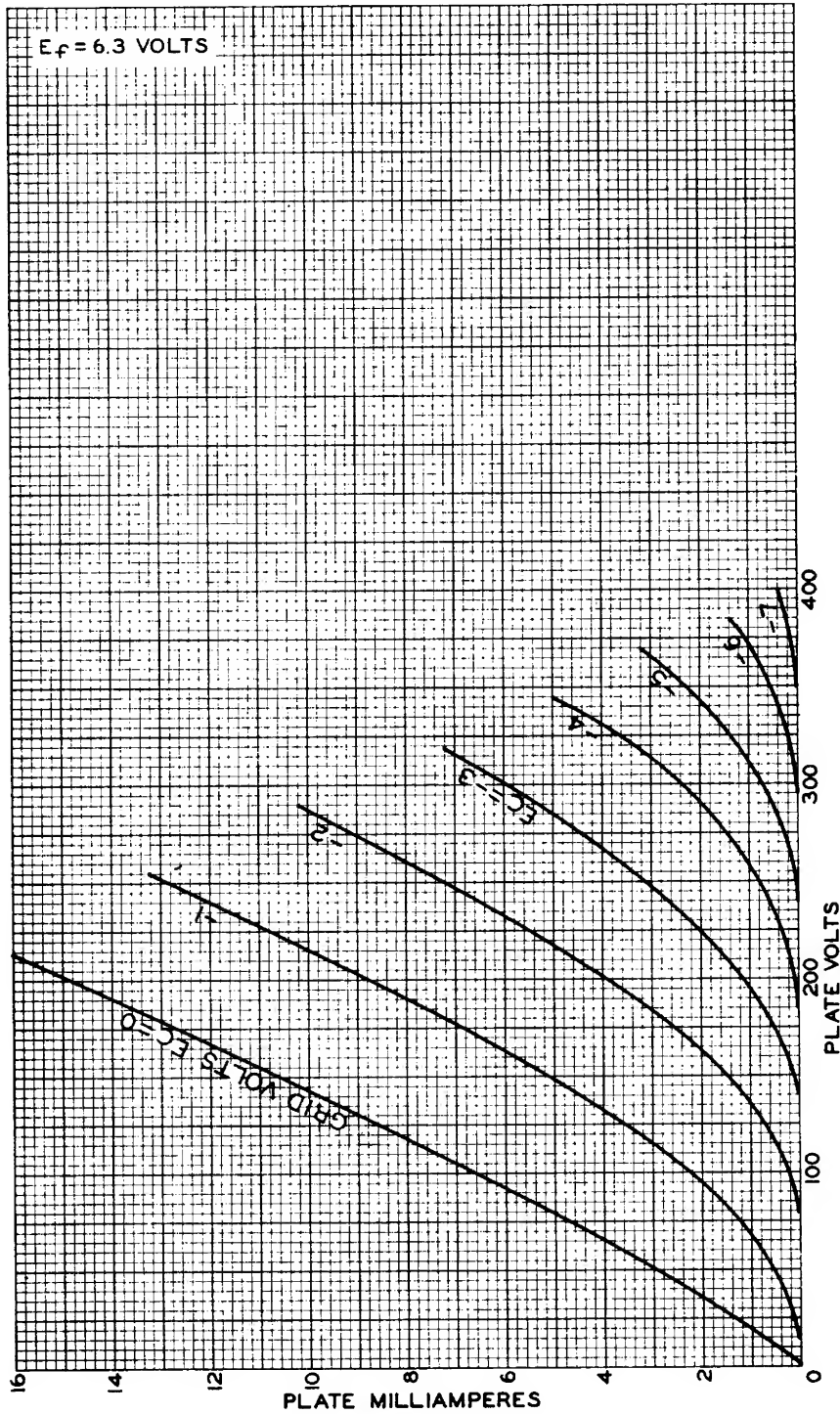
TENTATIVE DATA 2

6AW8



6AW8

AVERAGE PLATE CHARACTERISTICS TRIODE UNIT



JUNE 14, 1955

TUBE DIVISION
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

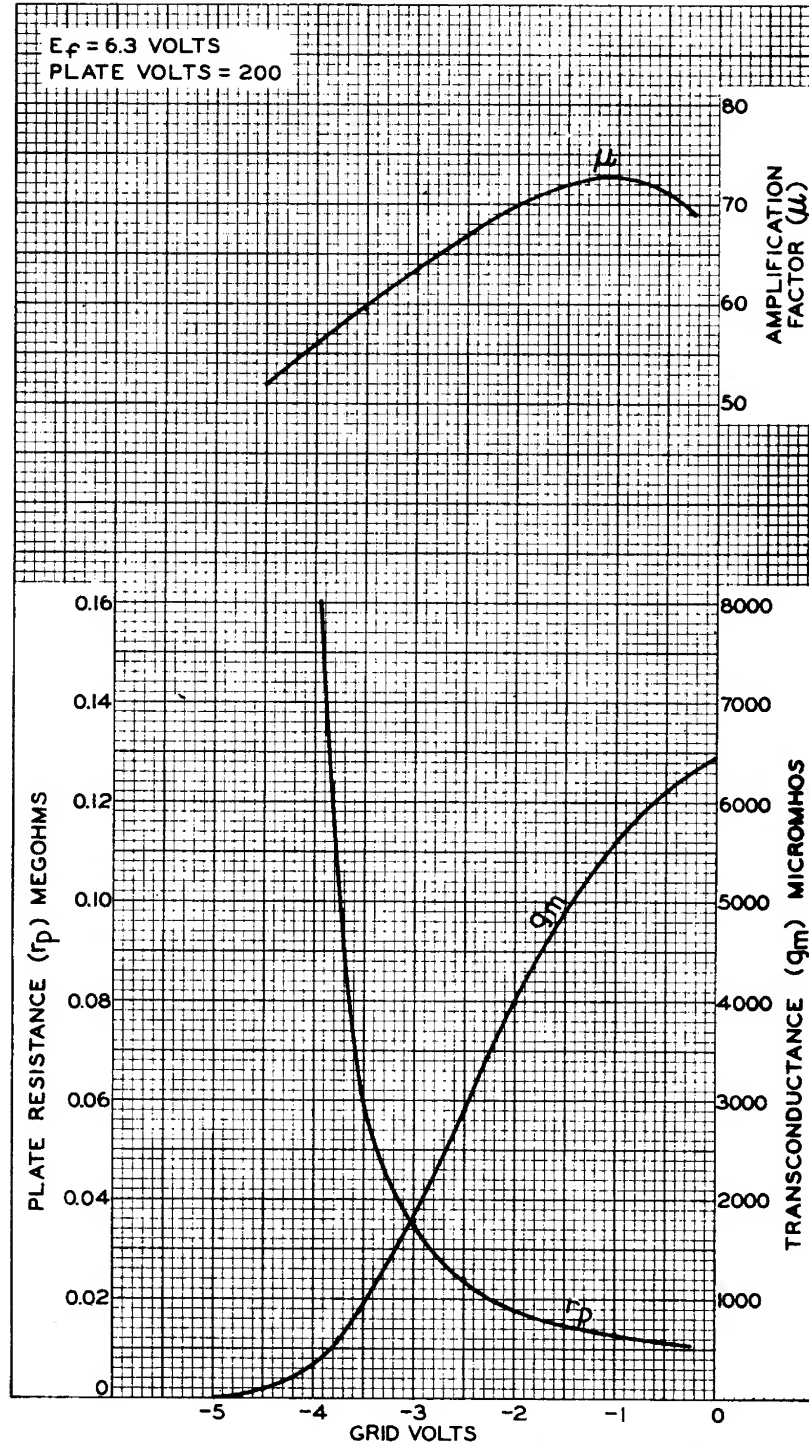
92CM-8644



6AW8

AVERAGE CHARACTERISTICS TRIODE UNIT

6AW8



JUNE 16, 1955

TUBE DIVISION
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

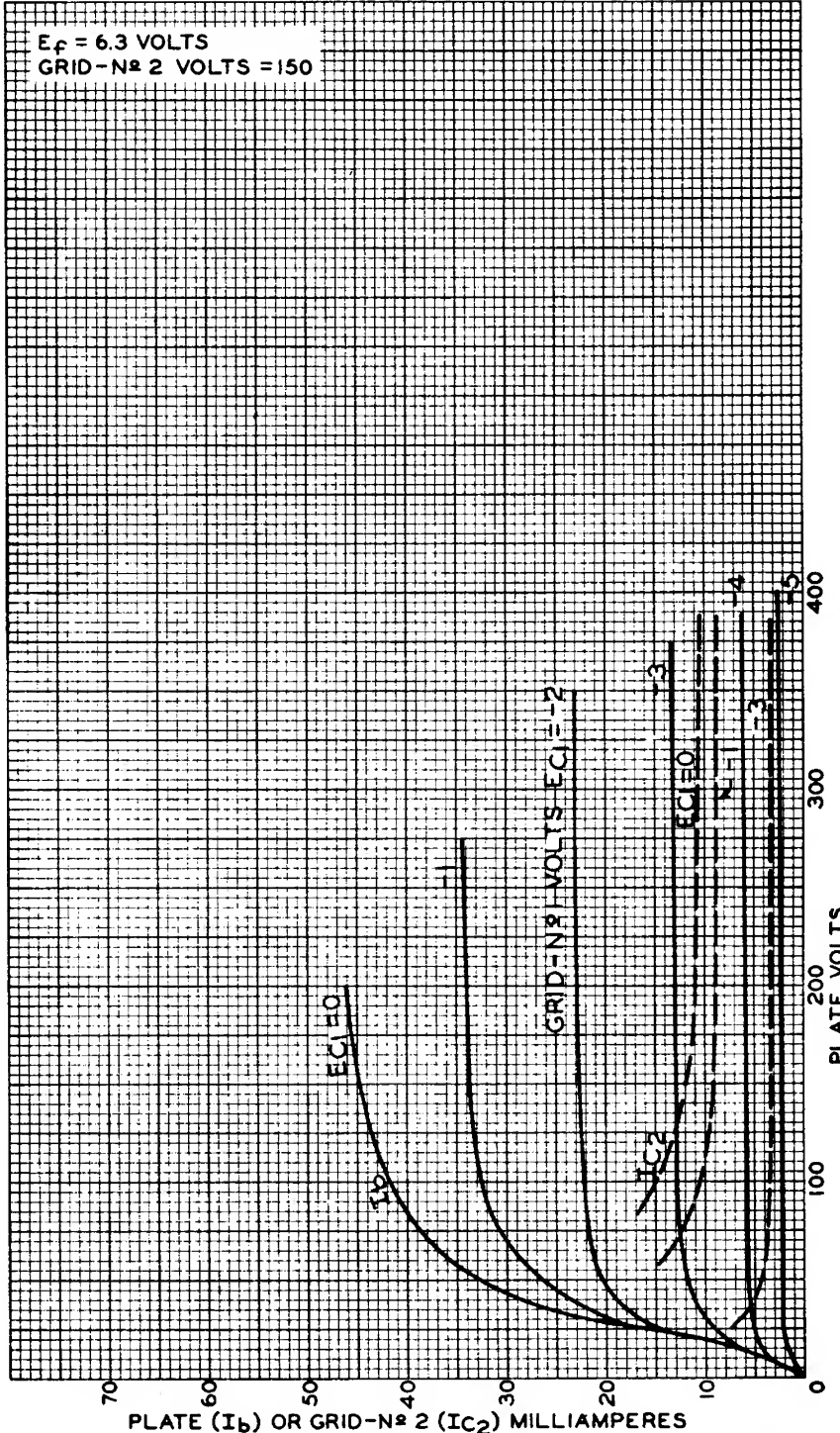
92CM-8647

6AW8



6AW8

AVERAGE CHARACTERISTICS PENTODE UNIT



JUNE 14, 1955

TUBE DIVISION
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

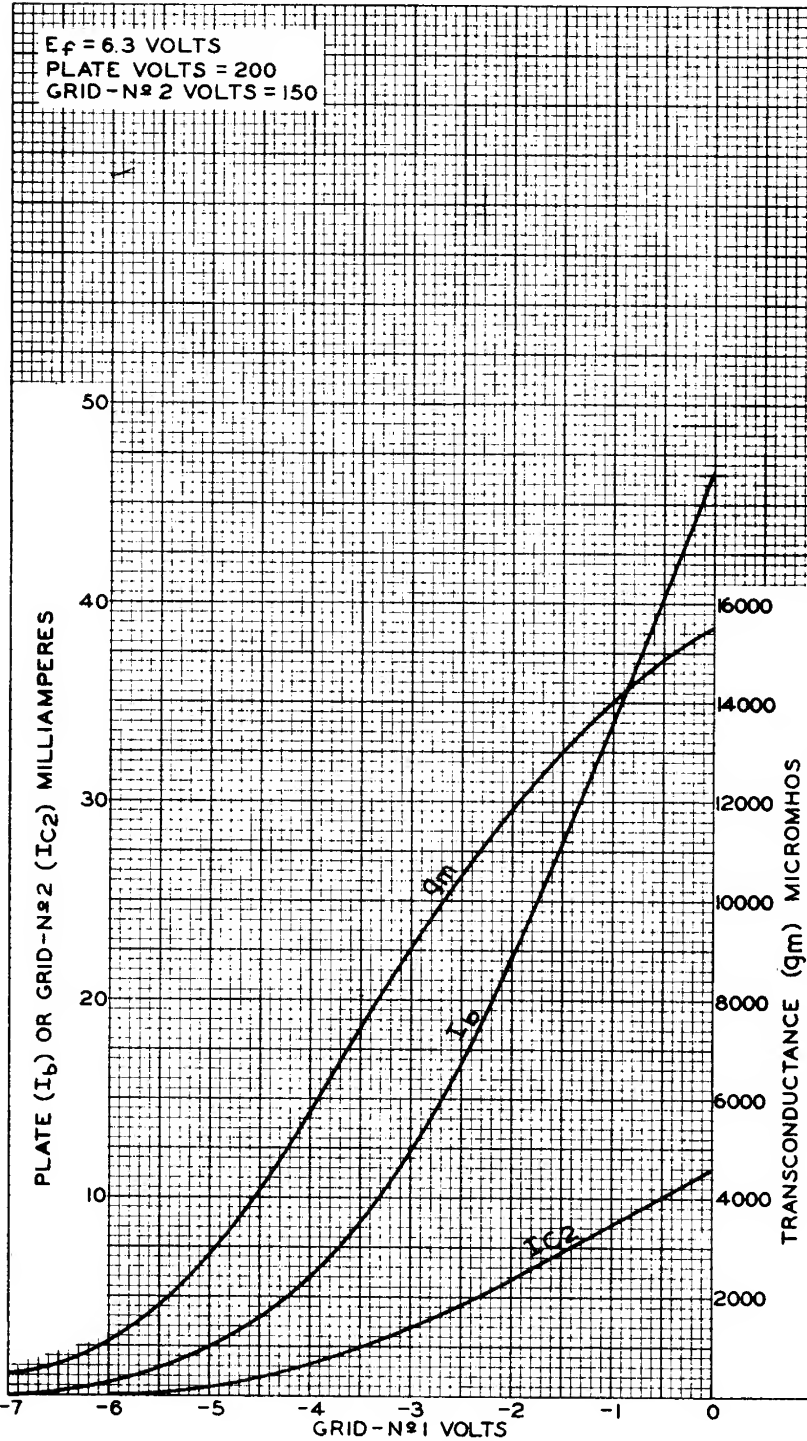
92CM-8645



6AW8

AVERAGE CHARACTERISTICS
PENTODE UNIT

6AW8



JUNE 15, 1955

TUBE DIVISION
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

92CM-8646